Overview

Useful For
Aids in the diagnosis of giant cell tumor of bone (GCTB)

Reflex Tests

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHTOI</td>
<td>IHC Initial, Tech Only</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>IHTOA</td>
<td>IHC Additional, Tech Only</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Testing Algorithm
For the initial technical component only immunohistochemical (IHC) stain performed, the appropriate bill-only test ID will be reflexed and charged (IHTOI). For each additional technical component only IHC stain performed, an additional bill-only test ID will be reflexed and charged (IHTOA).

Method Name
Immunohistochemistry

NY State Available
Yes

Specimen

Specimen Type
TECHONLY

Advisory Information
This test includes only technical performance of the stain (no pathologist interpretation is performed). If diagnostic consultation by a pathologist is required order PATHC / Pathology Consultation.

Mayo Clinic Laboratories has multiple histone immunostains available. See table for ordering guidance.

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Published Name</th>
<th>Indication</th>
<th>Mayo Clinic Slide Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>HG34W</td>
<td>Histone 3.3 G34W (H3F3A G34W) Immunostain, Technical Component Only</td>
<td>Giant cell tumor of bone (GCTB)</td>
<td>H3 G34W</td>
</tr>
<tr>
<td>HK27M</td>
<td>Histone H3 K27M Mutant (H3 K27M) Immunostain, Technical Component Only</td>
<td>K27M mutant midline gliomas</td>
<td>H3 K27M</td>
</tr>
</tbody>
</table>
**Test Definition: HG34W**
Histone H3 G34W IHC, Tech Only

<table>
<thead>
<tr>
<th>Test Code</th>
<th>Description</th>
<th>Specimen Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISME</td>
<td>Histone H3 Trimethyl K27 (H3 K27me[3]) Immunostain, Technical Component Only</td>
<td>MPNST and K27M mutant midline gliomas</td>
<td>H3 K27me3</td>
</tr>
<tr>
<td>HK36M</td>
<td>Histone H3 K36M Mutant (H3F3 K36M) Immunostain, Technical Component Only</td>
<td>Chondroblastoma</td>
<td>H3 K36M</td>
</tr>
</tbody>
</table>

**Shipping Instructions**
Attach the green pathology address label and the pink Immunostain Technical Only label included in the kit to the outside of the transport container.

**Specimen Required**

**Supplies:** Immunostain Technical Only Envelope (T693)

**Specimen Type:** Tissue

**Container/Tube:** Immunostain Technical Only Envelope (T693)

**Preferred:** 2 unstained positively charged glass slide (25- x 75- x 1-mm) per test ordered; sections 4-microns thick.

**Acceptable:** Formalin-fixed, paraffin-embedded (FFPE) tissue block

**Digital Image Access**
1. Information on accessing digital images of immunohistochemical (IHC) stains and the manual requisition form can be accessed through this website: [www.mayocliniclabs.com/test-info/ihc/index.html](http://www.mayocliniclabs.com/test-info/ihc/index.html)

2. Clients ordering stains using a manual requisition form will not have access to digital images.

3. Clients wishing to access digital images must place the order for IHC stains electronically. Information regarding digital imaging can be accessed through this website: [www.mayocliniclabs.com/test-info/ihc/faq.html](http://www.mayocliniclabs.com/test-info/ihc/faq.html)

**Reject Due To**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet/frozen tissue Cytology smears Nonformalin fixed tissue Nonparaffin embedded tissue Noncharged slides ProbeOn slides</td>
<td>Reject</td>
</tr>
</tbody>
</table>

**Specimen Stability Information**

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECHONLY</td>
<td>Ambient (preferred)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refrigerated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clinical and Interpretive**
Clinical Information
This test is intended to identify the presence of histone H3 G34W (H3F3A G34W). Giant cell tumors of bone (GCTB) are generally benign tumors characterized by mononuclear stromal cells and osteoclast-like giant cells. Up to 95% of GCTB have H3F3A gene mutation.

Interpretation
This test includes only technical performance of the stain (no pathologist interpretation is performed). If diagnostic consultation by a pathologist is required order PATHC / Pathology Consultation.

The positive and negative controls are verified as showing appropriate immunoreactivity. If a control tissue is not included on the slide, a scanned image of the relevant quality control tissue is available upon request. Contact 855-516-8404.

Interpretation of this test should be performed in the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

Cautions
Age of a cut paraffin section can affect immunoreactivity. Stability thresholds vary widely among published literature and are antigen-dependent. Best practice is for paraffin sections to be cut fresh.

Clinical Reference


Performance
Method Description
Immunohistochemistry on sections of paraffin-embedded tissue.(Unpublished Mayo method)

PDF Report
No

Day(s) and Time(s) Test Performed
Monday through Friday

Analytic Time
1 day

Maximum Laboratory Time
3 days
Specimen Retention Time
Until staining is complete

Performing Laboratory Location
Rochester

Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification
This test has been cleared, approved or is exempt by the U.S. Food and Drug Administration and is used per manufacturer’s instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information
88342-TC, primary
88341-TC, if additional IHC

LOINC® Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HG34W</td>
<td>Histone H3 G34W IHC, Tech Only</td>
<td>Order only; no result</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result ID</th>
<th>Test Result Name</th>
<th>Result LOINC Value</th>
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</thead>
<tbody>
<tr>
<td>604698</td>
<td>Histone H3 G34W IHC, Tech Only</td>
<td>Bill only; no result</td>
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</tbody>
</table>